CLAIMS

1. An optical disk device for writing on and/or reading from an optical disk information by focusing a light spot from an optical pickup onto the optical disk, said optical disk device comprising:

a tracking adjustment system that performs tracking adjustment of said optical pickup with respect to said optical disk;

a sled adjustment system that adjusts a sled position of said optical pickup; and

a control means that controls said tracking and sled adjustment systems,

wherein said sled adjustment system and said tracking adjustment system are controlled independently, and

wherein said disk device further comprises:

an offset value acquisition means that detects at prescribed intervals a tracking drive signal output from said tracking adjustment system and acquires signal values of the tracking drive signal as tracking drive offset values;

an offset representative value computation means that computes an offset representative value based on multiple tracking drive offset values for one lap of said optical disk that are acquired by said offset value acquisition means;

an offset value comparison means that compares an offset center value, which is the tracking drive offset value in the state in which no tracking adjustment control is performed, and the offset representative value computed by said offset representative value computation means; and

a sled drive decision means that decides, based on the comparison result by said offset value comparison means, whether to drive said sled adjustment system.

2. An optical disk device according to claim 1, further comprising:

a rotation adjustment system that performs rotation adjustment of a spindle motor that rotates the optical disk; and

wherein said offset value acquisition means has a rotation drive signal monitoring unit that monitors the rotation drive signal output from said rotation adjustment system.

3. An optical disk device according to claim 1, wherein said offset representative value computation means computes the offset representative value by adding up multiple tracking drive offset values obtained by said offset value acquisition means and averaging the values that added up.

4. An optical disk device according to claim 3, wherein said sled drive decision means decides whether to drive said sled adjustment system based on a larger-smaller relationship between said offset representative value and said offset center value, and the difference between said offset representative value and said offset center value.

5. An optical disk device according to claim 1, wherein said offset value acquisition means, said offset representative value computation means, said offset value comparison means, and said sled drive decision means are constituted as software executed in a microcomputer that includes said control means.

6. An optical disk device for writing on and/or reading from an optical disk information by focusing a light spot from an optical pickup onto the optical disk, said optical disk device comprising:

a tracking adjustment system that performs tracking adjustment of said optical pickup with respect to said optical disk;

a sled adjustment system that adjusts a sled position of said optical pickup; and

a control unit that controls said tracking and sled adjustment systems,

wherein said sled adjustment system and said tracking adjustment system are

controlled independently, and

wherein said disk device further comprising:

a unit that detects at prescribed intervals the tracking drive signal output from said tracking adjustment system; and

a unit that drives said sled adjustment system based on the value of said detected tracking drive signal.

7. An optical disk device according to claim 6, wherein the unit that drives said sled adjustment system further comprises:

a unit that determines an average value of said tracking drive signal values;

a unit that determines a difference value between said average value and a prescribed standard value; and

a unit that determines, according to said difference value, at least one of the amount and/or direction to move said sled adjustment system.

8. An optical disk device according to claim 6, wherein the unit that drives said sled adjustment system further comprises:

a unit that determines an average value of said tracking drive signal values;

a unit that determines a difference value between said average value and a prescribed standard value; and

a unit that determines, according to said difference value, whether to move said sled adjustment system.

9. An optical disk device according to claim 6, wherein the unit that drives said sled adjustment system further comprises:

a unit that determines an eccentricity component of said optical disk from said tracking drive signal values; and

a unit that determines, based on said eccentricity component, at least one of the amount and/or direction to move said sled adjustment system.

10. A control method for an optical disk device that writes on and/or reads from an optical disk information by focusing a light spot from an optical pickup onto the optical disk, and includes a tracking adjustment system that performs tracking adjustment of said optical pickup with respect to said optical disk, a sled adjustment system that adjusts a sled position of said optical pickup, and a control means that controls said tracking and sled adjustment systems, wherein said sled adjustment system and said tracking adjustment system are controlled independently,

wherein said control method comprising:

an offset value acquisition step that detects at prescribed intervals a tracking drive signal output from said tracking adjustment system and acquires signal values of the tracking drive signal as tracking drive offset values;

an offset representative value computation step that computes an offset representative value based on multiple tracking drive offset values for one lap of said optical disk that are acquired by said offset value acquisition step;

an offset value comparison step that compares an offset center value, which is the tracking drive offset value in the state in which no tracking adjustment control is performed, and the offset representative value computed by said offset representative value computation step; and

a sled drive decision step that decides, based on the comparison result by said offset value comparison step, whether to drive said sled adjustment system.

11. A control method according to claim 10, wherein said optical disk device further comprising a rotation adjustment system that performs rotation adjustment of a spindle motor that rotates the optical disk,

wherein said offset value acquisition step has a rotation drive signal monitoring step that monitors the rotation drive signal output from said rotation adjustment system.

12. A control method according to claim 10, wherein said offset representative value computation step computes the offset representative value by adding up multiple tracking drive offset values obtained by said offset value acquisition step and averaging the values that added up.

13. A control method according to claim 12, wherein said sled drive decision step decides whether to drive said sled adjustment system based on a larger-smaller relationship between said offset representative value and said offset center value, and the difference between said offset representative value and said offset center value.

14. A control method for an optical disk device that writes on and/or reads from an optical disk information by focusing a light spot from an optical pickup onto the optical disk, and includes a tracking adjustment system that performs tracking adjustment of said optical pickup with respect to said optical disk, a sled adjustment system that adjusts a sled position of said optical pickup, and a control unit that controls said tracking and sled adjustment systems, wherein said sled adjustment system and said tracking adjustment system are controlled independently,

wherein said control method comprising:

a step that detects at prescribed intervals the tracking drive signal output from said tracking adjustment system; and

a step that drives said sled adjustment system based on the value of said detected tracking drive signal.

15. A control method according to claim 14, wherein the step that drives said sled adjustment system further comprises:

a step that determines an average value of said tracking drive signal values;

a step that determines a difference value between said average value and a prescribed standard value; and

a step that determines, according to said difference value, at least one of the amount and/or direction to move said sled adjustment system.

16. A control method according to claim 14, wherein the step that drives said sled adjustment system further comprises:

a step that determines an average value of said tracking drive signal values;

a step that determines a difference value between said average value and a prescribed standard value; and

a step that determines, according to said difference value, whether to move said sled adjustment system.

17. A control method according to claim 14, wherein the step that drives said sled adjustment system further comprises:

a step that determines an eccentricity component of said optical disk from said tracking drive signal values; and

a step that determines, based on said eccentricity component, at least one of the amount and/or direction to move said sled adjustment system.

18. A recording medium storing a program, which is readable and executable by computer, for controlling an optical disk device that writes on and/or reads from an optical disk information by focusing a light spot from an optical pickup onto the optical disk, and includes a tracking adjustment system that performs tracking adjustment of said optical pickup with respect to said optical disk, a sled adjustment system that adjusts a sled position of said optical pickup, and a control means that controls said tracking and sled adjustment systems, wherein said sled adjustment system and said tracking adjustment system are controlled independently,

wherein said program comprising:

an offset value acquisition step that detects at prescribed intervals a tracking drive signal output from said tracking adjustment system and acquires signal values

of the tracking drive signal as tracking drive offset values;

an offset representative value computation step that computes an offset representative value based on multiple tracking drive offset values for one lap of said optical disk that are acquired by said offset value acquisition step;

an offset value comparison step that compares an offset center value, which is the tracking drive offset value in the state in which no tracking adjustment control is performed, and the offset representative value computed by said offset representative value computation step; and

a sled drive decision step that decides, based on the comparison result by said offset value comparison step, whether to drive said sled adjustment system.